

Preface

This book contains papers presented at the 17th European Symposium of Computer Aided Process Engineering (ESCAPE 17) held in Bucharest, Romania, from 27th to 30th May 2007. The meeting was jointly organised by University “Politehnica” of Bucharest and University “Babeş-Bolyai” of Cluj-Napoca, as event no. 659 of the European Federation of Chemical Engineering. The most recent ESCAPE symposia took place in Lisbon, Portugal (2004), Barcelona, Spain (2005) and Garmisch - Partenkirchen, Germany (2006).

The ESCAPE series serve as a forum for scientists and engineers from academia and industry to discuss progress achieved in the area of Computer Aided Process Engineering (CAPE). The main goal of ESCAPE 17 was to emphasize the continuity in research of innovative concepts and systematic design methods as well the diversity of applications emerged from the demands of sustainable development. ESCAPE 17 highlighted also the progress software technology needed for implementing simulation based tools.

The symposium was organized on 5 Themes and 27 topics, following the main trends in CAPE area: Modelling, Process and Products Design, Optimisation and Optimal Control and Operation, System Biology and Biological Processes, Process Integration and Sustainable Development. Since over the years Romania brought a significant contribution to the development of the petroleum industry, the organisers gave special attention to CAPE topics related to oil&gas industries.

The International Scientific Committee had a hard task to select about 300 contributions from about 550 submitted abstracts. Two or three reviewers evaluated each abstract and manuscript. Recommended papers are printed in this book. All the contributions are included on the CD-ROM attached to the book. The organisers are grateful to the members of the International Scientific Committee and to Special Reviewers for their effort.

Participants from 50 countries attended ESCAPE 17. Invited speakers presented 5 plenary lectures tackling broad subjects and 10 keynote lectures of interest for selected themes topics. Satellite events added a plus to the scientific dimension to this symposium. The high-quality scientific contributions included in this volume serve as extensive documentation basis for those interested. We hope it brings a real added value to the literature of the CAPE field.

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